

U. S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

WASHINGTON

ADDRESS REPLY TO
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IN YOUR REPLY
REFER TO FILE

WEB: BLG

January 19, 1937.

SP-2559

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To the Producers, Distributors, Users
and Others Interested in the
Packaging of Extracted Honey:

Signed acceptances have been received from a sufficient number of producers, packers, distributors, users, container manufacturers, and others interested to authorize the promulgation of the current revision of Simplified Practice Recommendation R156, Containers for Extracted Honey. We are therefore in position to announce that the revision may be considered in effect as of February 1, 1937.

The new edition will be identified as Simplified Practice Recommendation R156-37, and as soon as they are available in printed form a free copy will be sent to you and to all acceptors of record, for file and reference. Additional copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for five cents each. A discount of 25 per cent on lots of 100 or more copies is available to those wishing to procure a supply of this publication for business purposes.

Division of Simplified Practice,
W. E. Braithwaite.

U. S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

WASHINGTON

ADDRESS REPLY TO
NATIONAL BUREAU OF STANDARDS

WEB:CR

August 1, 1936.

IN YOUR REPLY
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SP-2515

To the Producers, Packers and
Distributors of Extracted Honey:

The members of the Standing Committee in charge of the regular review of Simplified Practice Recommendation R156-34, Containers for Extracted Honey, have voted in favor of the inclosed modified proposed revision of this recommendation.

If this simplified schedule of sizes for honey packages meets with your approval, we suggest that you indicate that fact by signing and returning to us the attached acceptance form, using the inclosed return envelope which requires no postage.

Any suggestions you may wish to make concerning this program will be referred promptly to the Standing Committee for its information and guidance.

In the event that you are not interested in this program, please notify us in the margin of this letter and return it to us, and we will correct our mailing list accordingly.

A prompt reply will be appreciated.

Inclosures.

Division of Simplified Practice
By W. E. Braithwaite.

TO THE ACCEPTOR

In signing this acceptance blank, please bear the following points clearly in mind.

1. **RESPONSIBILITY OF THE INDUSTRY** --- This waste elimination program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned. The Department co-operates only when requested to do so, and only to such extent as appears desirable in order to secure the most beneficial results for all concerned.
2. **THE ACCEPTOR'S RESPONSIBILITY** --- You are entering into an entirely voluntary agreement, whereby the members of the industry, together with the distributors and consumers of the product, and others concerned, hope to secure the benefits inherent in Simplified Practice. The purpose of this simplification is to reduce the number of sizes necessary for members of the industries to produce and to coordinate the specifications of different consumer groups. **CONSUMERS** can make the program more effective if they will make a definite effort to **CONFINE THEIR PURCHASES TO THE SIZES SPECIFIED IN THIS SIMPLIFIED PRACTICE RECOMMENDATION.**
3. **RESPONSIBILITY OF THE DEPARTMENT** --- The Department of Commerce has no regulatory powers with respect to Simplified Practice. Instead, Simplified Practice is based on voluntary cooperation. The function performed by the Department of Commerce is fourfold: First, to provide a neutral agency which will insure adequate consideration of the needs of all interests; second, to secure the widespread adoption of and close adherence to the recommendation; third, to add all possible prestige to this waste elimination plan; and fourth, to supply such assistance and advice in support of this program as past experience with similar projects may suggest.
4. **ACCEPTANCE BY INDUSTRY** --- When the Simplified Practice Recommendation identified on the face of this form has been accepted by manufacturers, distributors, and users whose production, distribution, and use of the named commodity represents sufficient volume of that commodity to insure the initial success of the program, it will be indorsed and published by the Department of Commerce in the interest of waste elimination in industry. If, in the opinion of the Standing Committee of the industry and of the Department of Commerce, the volume of indicated support of any recommendation is insufficient to justify indorsement and publication, the Department reserves the right to withhold its indorsement and postpone publication until sufficient support has been obtained.

ACCEPTANCE OF SIMPLIFIED PRACTICE RECOMMENDATION

(NOTE: This sheet, properly filled in and signed, will be authority for the Division of Simplified Practice, National Bureau of Standards, to record your organization as an acceptor of the Simplified Practice Recommendation. The inclosed envelope requires no postage.)

-oOo-

ACCEPTANCE -- Having considered the statements on the REVERSE of this sheet, we hereby record our acceptance of the revised simplified-practice recommendation covering CONTAINERS FOR EXTRACTED HONEY as the basis for our standard practice following announcement by the Department of Commerce that this recommendation has been accepted for promulgation.

PROMOTING ADHERENCE -- Realizing that the value of any simplified practice recommendation obviously depends upon the amount of active support it receives, we will use such efforts as may be appropriate to secure additional adherence whenever the opportunity offers. (*)

SUPPLYING REVISION DATA -- We will supply, upon request, such information and suggestions as may be helpful in assisting a representative standing committee of the industry to determine the effectiveness of the recommendation and to keep it abreast of current conditions and best practice. It is understood that the standing committee, in cooperation with the Department of Commerce, will conduct periodic reviews to this end, and will recommend such changes as seem necessary. It is further understood that any changes proposed by the committee will be submitted to all acceptors of this recommendation, and will become effective only when a sufficient volume of acceptance has been recorded to indicate general approval.

(Kindly typewrite or print the first three lines)

Company _____

Street Address _____

City and State _____

Signed _____

Title _____

Date _____

IMPORTANT: Please designate below the proper classification of your company. This will eliminate unnecessary correspondence. Our interest is that of a _____

Producer () of Containers

Distributor (() for Extracted

or Consumer () Honey

or _____

(insert other classification)

(*) In this connection, attention is invited to the importance of identification of simplified lines in trade literature, advertisements, etc., as a means of increasing the consumer's familiarity with the program.

PROPOSED REVISION
OF
SIMPLIFIED PRACTICE RECOMMENDATION R156-34
CONTAINERS FOR EXTRACTED HONEY

(Aug. 1, 1936)

NOTE: PLEASE KEEP THIS BULLETIN until you have received from the Government Printing Office the same text in the form of a printed book.

As soon as this program has been approved by the industry, the Division of Simplified Practice will send you a letter announcing the date from which the revision is to be effective. At that time also an announcement will be made as to the availability of this recommendation in printed form.

PROPOSED REVISION OF
SIMPLIFIED PRACTICE RECOMMENDATION R156-34
CONTAINERS FOR EXTRACTED HONEY

* * *

On February 27, 1933 representatives of container manufacturers, honey producers, packers, and others interested, met in conference for the purpose of drafting a Simplified Practice Recommendation covering the sizes (capacities) of containers for extracted honey. The industry accepted the proposal, and approved it for promulgation by the United States Department of Commerce, through the National Bureau of Standards.

In March, 1936 the Standing Committee in charge of the regular review of this Simplified Practice Recommendation, proposed that the schedules for glass containers, and tin containers, be revised as shown in the following:

GLASS CONTAINERS

Capacity, 5, 8, 16, 24,*32 and 48 ounces avoirdupois.

TIN CONTAINERS

Capacity, 2-1/2, 5, 10 and 60 pounds avoirdupois.

* The 32-ounce size was added in July, 1936, by the Standing Committee, in recognition of the indicated demand for this capacity, and as a means of assuring increased adherence to this recommendation.

This revised simplified list of capacities is to be effective one month after the announcement by the Department of Commerce that the required degree of support has been recorded.

Edwin W. Ely, Chief,
Division of Simplified Practice.

Lyman J. Briggs, Director,
National Bureau of Standards.

ACCEPTANCE OF SIMPLIFIED PRACTICE RECOMMENDATION
(Please retain this sheet for your files.)

-oOo-

ACCEPTANCE -- Having considered the statements on the REVERSE of this sheet, we hereby record our acceptance of the revised simplified practice recommendation covering CONTAINERS FOR EXTRACTED HONEY as the basis for our standard practice following announcement by the Department of Commerce that this recommendation has been accepted for promulgation.

PROMOTING ADHERENCE -- Realizing that the value of any simplified practice recommendation obviously depends upon the amount of active support it receives, we will use such efforts as may be appropriate to secure additional adherence whenever the opportunity offers. (*)

SUPPLYING REVISION DATA -- We will supply, upon request, such information and suggestions as may be helpful in assisting a representative standing committee of the industry to determine the effectiveness of the recommendation and to keep it abreast of current conditions and best practice. It is understood that the standing committee, in cooperation with the Department of Commerce, will conduct periodic reviews to this end, and will recommend such changes as seem necessary. It is further understood that any changes proposed by the committee will be submitted to all acceptors of this recommendation, and will become effective only when a sufficient volume of acceptance has been recorded to indicate general approval.

(Kindly typewrite or print the first three lines.)

Company	_____	
Street Address	_____	IMPORTANT: Please designate below the proper classification of your company. This will eliminate unnecessary correspondence. Our interest is that of a Producer () of Containers Distributor () for Extracted Consumer () Honey or (insert other classification)
City and State	_____	
Signed	_____	
Title	_____	
Date	_____	

(*) In this connection, attention is invited to the importance of identification of simplified lines in trade literature, advertisements, etc., as a means of increasing the consumer's familiarity with the program.

TO THE ACCEPTOR

In signing this acceptance blank, please bear the following points clearly in mind.

1. RESPONSIBILITY OF THE INDUSTRY -- This waste elimination program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned. The Department cooperates only when requested to do so, and only to such extent as appears desirable in order to secure the most beneficial results for all concerned.
2. THE ACCEPTOR'S RESPONSIBILITY -- You are entering into an entirely voluntary agreement, whereby the members of the industry, together with the distributors and consumers of the product and others concerned, hope to secure the benefits inherent in Simplified Practice. It is obvious that instances will occur in which it will be necessary to supply or purchase items not included in the simplified list. The purpose of simplification is to limit regular lines of stock items to those described in the schedule, and to place all others in the class of specials. CONSUMERS can make the program more effective if they will make a definite effort to CONFINE THEIR PURCHASES TO THE SIZES, ETC., SPECIFIED IN THIS SIMPLIFIED PRACTICE RECOMMENDATION.
3. RESPONSIBILITY OF THE DEPARTMENT -- The Department of Commerce has no regulatory powers with respect to Simplified Practice. Instead, Simplified Practice is based on voluntary cooperation. The function performed by the Department of Commerce is fourfold: First, to provide a neutral agency which will insure adequate consideration of the needs of all interests; second, to secure the widespread adoption of and close adherence to the recommendation; third, to add all possible prestige to this waste elimination plan; and fourth, to supply such assistance and advice in support of this program as past experience with similar projects may suggest.
4. ACCEPTANCE BY INDUSTRY -- When the Simplified Practice Recommendation identified on the face of this form has been accepted by manufacturers, distributors, and users whose production, distribution, and use of the named commodity represents sufficient volume of that commodity to insure the initial success of the program, it will be indorsed and published by the Department of Commerce in the interest of waste elimination in industry. If, in the opinion of the standing committee of the industry and of the Department of Commerce, the volume of indicated support of any recommendation is insufficient to justify indorsement and publication, the Department reserves the right to withhold its indorsement and postpone publication until sufficient support has been obtained.

U. S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

WASHINGTON

ADDRESS REPLY TO
NATIONAL BUREAU OF STANDARDS

GS:MK

February 3, 1937.

THE LIBRARY OF THE
APR 27 1937
UNIVERSITY OF CALIFORNIA
IN YOUR REPLY
REFER TO FILE
SF-2562

To the Manufacturers, Distributors,
Users, and Others Interested in
Steel Horizontal Firebox Heating Boilers.

Signed acceptances have been received from
a sufficient number of producers, distributors, users,
and others interested to authorize the promulgation
of Simplified Practice Recommendation R157, Steel Hori-
zontal Firebox Heating Boilers.

New production under the simplified schedule
began on January 1, 1937, and the recommendation may
be considered in effect from that date.

The recommendation will be identified as Sim-
plified Practice Recommendation R157-37, and as soon as
it has been printed, a copy will be sent to you for
your file and reference.

Division of Simplified Practice,
George Schuster.

U. S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

WASHINGTON

ADDRESS REPLY TO
NATIONAL BUREAU OF STANDARDS

IN YOUR REPLY
REFER TO FILE

GS:MK

June 17, 1936

SP-2505

To the Manufacturers, Distributors, Users, and Others
Interested in Steel Horizontal Firebox Heating Boilers.

On November 5, 1934, we sent you a copy of the proposed Simplified Practice Recommendation for Steel Horizontal Firebox Heating Boilers, for which you subsequently filed your acceptance, or submitted comments and suggestions for revision. The number and character of the suggestions, especially those of the bituminous coal and stoker interests, indicated the need for certain changes to make the recommendation more generally acceptable. Promulgation of the recommendation was therefore held in abeyance pending further consideration by all concerned.

As a result of a series of conferences between the manufacturers of boilers and the interests referred to above, the following changes were approved:

Page 2, Table II - Change heading of the second column to read:

"Minimum Furnace Volume, Oil, Gas, or Bituminous Coal Fired";

Eliminate third column.

Page 8 - Delete paragraphs 4E and 5C.

Page 9 - Delete paragraphs 6C, 7C, and 7D.

Paragraph 7B, line 2 - Add a comma after "oil", strike out "or" between "oil" and "gas", and after "gas" add "or bituminous coal, stoker fired".

Strike out the formula which follows paragraph 7E and substitute therefor the following formula:

$$H = \sqrt{\frac{R}{22.5}} + \sqrt{\frac{R}{A}}$$

Remove Fig. 1 entitled "Standard Furnace Heights for Stoker Fired Boilers", and substitute the inclosed Fig. 1 with the same title.

For your convenience we are inclosing a copy of the original recommendation, to which the above corrections apply.

If the revised recommendation is satisfactory for your requirements, please indicate your approval and support by signing and returning the inclosed acceptance form, which will give us authority to list your organization with the acceptors in the printed book.

Inclosures.

Division of Simplified Practice,
George Schuster.

HEIGHT OF FURNACE IN INCHES

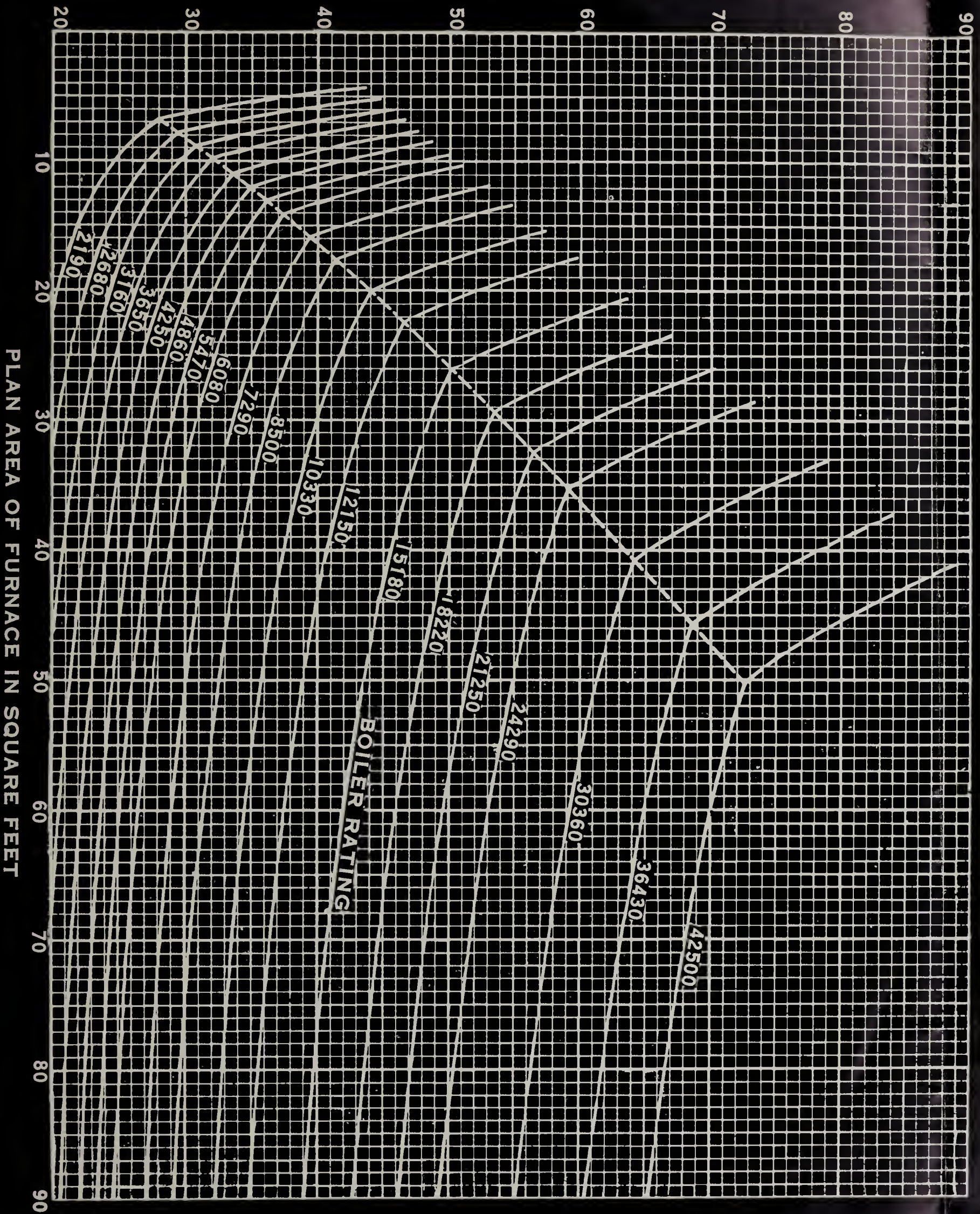


FIG. 1. STANDARD FURNACE HEIGHTS FOR STOKER FIRED BOILERS-BITUMINOUS COAL.

STEEL HORIZONTAL FIREBOX HEATING BOILERS

ACCEPTANCE OF SIMPLIFIED PRACTICE RECOMMENDATION

(NOTE: This sheet, properly filled in and signed, will be authority for the Division of Simplified Practice, National Bureau of Standards, to record your organization as an acceptor of the Simplified Practice Recommendation. The inclosed envelope requires no postage.)

----- 0 -----

ACCEPTANCE -- Having considered the statements on the REVERSE of this sheet, we hereby record our acceptance of the proposed simplified practice recommendation covering STEEL HORIZONTAL FIREBOX HEATING BOILERS as the basis for our standard practice following announcement by the Department of Commerce that this recommendation has been accepted for promulgation.

PROMOTING ADHERENCE -- Realizing that the value of any simplified practice recommendation obviously depends upon the amount of active support it receives, we will use such efforts as may be appropriate to secure additional adherence whenever the opportunity offers. (*)

SUPPLYING REVISION DATA -- We will supply, upon request, such information and suggestions as may be helpful in assisting a representative standing committee of the industry to determine the effectiveness of the recommendation and to keep it abreast of current conditions and best practice. It is understood that the standing committee, in cooperation with the Department of Commerce, will conduct periodic reviews to this end, and will recommend such changes as seem necessary. It is further understood that any changes proposed by the committee will be submitted to all acceptors of this recommendation, and will become effective only when a sufficient volume of acceptance has been recorded to indicate general approval.

(Kindly typewrite or print the first three lines)

Company _____

Street Address _____

City and State _____

Signed _____

Title _____

Date _____

IMPORTANT: Please designate below the proper classification of your company. This will eliminate unnecessary correspondence. Our interest is that of a

Producer () of Steel Horizontal Firebox Heating Boilers

Distributor ()

or Consumer ()

or _____

(insert other classification)

(*) In this connection, attention is invited to the importance of identification of simplified lines in trade literature, advertisements, etc., as a means of increasing the consumer's familiarity with the program.

TO THE ACCEPTOR

In signing this acceptance blank, please bear the following points clearly in mind.

1. **RESPONSIBILITY OF THE INDUSTRY** -- This waste elimination program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned. The Department cooperates only when requested to do so, and only to such extent as appears desirable in order to secure the most beneficial results for all concerned.
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4. **ACCEPTANCE BY INDUSTRY** -- When the Simplified Practice Recommendation identified on the face of this form has been accepted by manufacturers, distributors, and users whose production, distribution, and use of the named commodity represents sufficient volume of that commodity to insure the initial success of the program, it will be indorsed and published by the Department of Commerce in the interest of waste elimination in industry. If, in the opinion of the Standing Committee of the industry and of the Department of Commerce, the volume of indicated support of any recommendation is insufficient to justify indorsement and publication, the Department reserves the right to withhold its indorsement and postpone publication until sufficient support has been obtained.

SUMMARY REPORT OF GENERAL CONFERENCE
ON THE
SIMPLIFICATION OF
STEEL HORIZONTAL FIREBOX HEATING BOILERS

Held at
Hotel Cleveland
Cleveland, Ohio.
June 5, 1934.

SIMPLIFIED PRACTICE RECOMMENDATION
FOR
STEEL HORIZONTAL FIREBOX HEATING BOILERS

In accordance with the action of a general conference of the industry held on June 5, 1934, the United States Department of Commerce, through the National Bureau of Standards, submits for acceptance of all concerned, the following recommendation for Steel Horizontal Firebox Heating Boilers:

TABLE I 1/

Boiler Rating Hand Fired			:	Boiler Rating Mechanically			:	Heat-	Grate
			:	Fired			:	ing	Area
Sq. Ft.	Sq. Ft.	B.T.U. per	:	Sq. Ft.	Sq. Ft.	B.T.U. per	:	Sur-	:
Steam	Water	Hour	:	Steam	Water	Hour	:	face	:
Radiation	Radia-	:	:	Radia-	Radia-	:	:	:	:
	tion	:	:	tion	tion	:	:	:	:
1800	2880	432,000	:	2190	3500	525,600	:	129	7.9
2200	3520	528,000	:	2680	4280	643,200	:	158	8.9
2600	4160	624,000	:	3160	5050	758,400	:	186	9.7
3000	4800	720,000	:	3650	5840	876,000	:	215	10.5
3500	5600	840,000	:	4250	6800	1,020,000	:	250	11.4
4000	6400	960,000	:	4860	7770	1,166,400	:	286	12.2
4500	7200	1,080,000	:	5470	8750	1,312,800	:	322	13.4
5000	8000	1,200,000	:	6080	9720	1,459,200	:	358	14.5
6000	9600	1,440,000	:	7290	11660	1,749,600	:	429	16.4
7000	11200	1,680,000	:	8500	13600	2,040,000	:	500	18.1
8500	13600	2,040,000	:	10330	16520	2,479,200	:	608	20.5
10000	16000	2,400,000	:	12150	19440	2,916,000	:	715	22.5
12500	20000	3,000,000	:	15180	24280	3,643,200	:	893	25.6
15000	24000	3,600,000	:	18220	29150	4,372,800	:	1072	28.4
17500	28000	4,200,000	:	21250	34000	5,100,000	:	1250	30.9
20000	32000	4,800,000	:	24290	38860	5,829,600	:	1429	33.2
25000	40000	6,000,000	:	30360	48570	7,286,400	:	1786	37.4
30000	48000	7,200,000	:	36430	58280	8,743,200	:	2143	41.2
35000	56000	8,400,000	:	42500	68000	10,200,000	:	2500	44.7

1/ See appendix page 7, for explanatory material pertaining to these tables.

TABLE II

Boiler Rating Mechanically Fired	Minimum Furnace Volume Oil or gas fired Cu. Ft. ^{2/}	Minimum Furnace Volume, Bituminous Coal Stoker Fired Cu. Ft. ^{2/}
2190	15.7	17.6
2680	19.2	21.4
3160	22.6	25.3
3650	26.1	29.2
4250	30.4	34.0
4860	34.8	38.9
5470	39.1	43.8
6080	43.5	48.7
7290	52.1	58.4
8500	60.8	68.0
10330	73.8	82.7
12150	86.8	97.2
15180	108.5	121.5
18220	130.2	145.8
21250	151.8	170.0
24290	173.5	194.3
30360	216.9	242.9
36430	260.3	291.5
42500	303.6	340.0

^{2/} No minimum furnace volume shall be specified for mechanically fired boilers burning anthracite.

TABLE III

Hand Fired	Boiler rating Mechanically Fired	Steam Outlet Pipe Size, In.	Return Opening Pipe Size, In.	Safety Valve Opening No. Pipe Size, In.
1800	2190	6	3	1 1/2
2200	2680	6	3	1 1/2
2600	3160	6	3	2
3000	3650	6	3	2
3500	4250	6	3	2
4000	4860	6	3	2
4500	5470	6	3	2
5000	6080	6	3	2 1/2
6000	7290	8	4	2 1/2
7000	8500	8	4	2 1/2
8500	10330	8	4	3
10000	12150	8	4	3
12500	15180	8	4	2
15000	18220	8	4	2 1/2
17500	21250	8	4	2 1/2
20000	24290	8	4	2 1/2
25000	30360	10	6	2 1/2
30000	36430	10	6	3
35000	42500	10	6	3

This recommendation, if accepted by the industry, is effective from July 1, 1935.

Edwin W. Ely,
Chief, Division of Simplified Practice.

Lyman J. Briggs,
Director, National Bureau of Standards.

DEVELOPMENT OF PROJECT

In 1930, and at the request of the Steel Heating Boiler Industry, the Division of Simplified Practice, of the National Bureau of Standards, made a survey of variety of steel heating boilers. A report of this survey was completed in 1931 and submitted to the manufacturers for their use as the basis for drafting a proposed Simplified Practice Recommendation.

For this purpose, the Steel Heating Boiler Institute organized a Simplification and Standardization Committee, with membership as follows:

Russell, W. B., Chairman,	Kewanee Boiler Corporation,	Kewanee, Ill.
Fisher, C. E.	Titusville Iron Works Co.,	Titusville, Pa.
Jones, Norman	Orr & Sember, Inc.,	Reading, Pa.
Little, C. B.	The Brownell Co.,	Dayton, Ohio.
Lockett, John	Fitzgibbons Boiler Co.	570 7th Ave., N.Y.C.
Novotney, T.A.	National Radiator Corp.,	Johnstown, Pa.
Turner, J. W.	Pacific Steel Boiler Corp.,	1056 First Nat'l Bank Bldg., Detroit Mich.

The committee, at the conclusion of its work, submitted a proposed recommendation and requested that a general conference of all interests be called, under the procedure of the Division of Simplified Practice, to consider the proposal.

GENERAL CONFERENCE

A general conference of all interests was held in Cleveland, Ohio, on June 5, 1934, in conjunction with a meeting of the Steel Heating Boiler Institute.

Considerable discussion by members of the industry centered on the value and economy which would result from the adoption of a simplified practice recommendation. A poll of the members present indicated that producers representing approximately 80% of actual production were in favor of proceeding with the program and the conference promptly proceeded to consider the program in detail.

Table I of the Committee's recommendation was adopted without change.

The discussion on Table II was lead by representatives of the Anthracite Coal Industry. Objection was raised to Column 3 which specified larger furnace volumes for stoker-fired fuels than for gas or oil fired fuels. Representatives of the Anthracite Industry pointed out that in view of the smokeless combustion of anthracite, and in view of tests and experience, actually less furnace volume was required. After a general discussion the heading for Column 3 then was changed to include bituminous coal. At the suggestion of Allen J. Johnston, Director, Anthracite Institute Laboratory, the following explanatory note was added at the bottom of Table II.

"No minimum furnace value shall be specified for mechanically fired boilers burning anthracite."

No change was found necessary in Table III and the schedule, with Table II modified as already explained, was then adopted.

STANDING COMMITTEE AND EFFECTIVE DATE

Because of the current condition of the market and the time required to begin production conforming to this recommendation, the conference decided on July 1, 1935, as the effective date for new production.

The conference authorized the appointment of a Standing Committee for the purpose of enlisting the support of producers, distributors, and users, and others interested. This committee, with the cooperation of the Division of Simplified Practice, will maintain interest and adherence by keeping the program abreast of current practice through periodic revision. All comments and suggestions will be referred to it for consideration at revision meetings and any proposed changes will be submitted to the acceptors before final action is taken. The personnel of this committee will be announced later.

Upon recommendation of the Simplification and Standardization Committee of the Steel Heating Boiler Institute, the conference decided to refer to the Standing Committee for final action the question of submitting the proposed program to the American Standards Association for approval.

The following were in attendance at the general conference.

Adams, Homer	Fitzgibbons Boiler Co.,	New York, N. Y.
Bastedo, A. E.	Geneva Boiler Works	
	Burnham Boiler Corp.	Irvington, N. Y.
Bros, Ernest	Wm. Bros Boiler Mfg. Co.,	Minneapolis, Minn.
Collette, John R.	Pacific Steel Boiler Corp.	Detroit, Mich.
Doyle, Joseph J.	Ames Iron Works	Oswego, N. Y.
Dickson, R. B.	Kewanee Boiler Corp.	Kewanee, Ill.
Ellis, J. T.	National Radiator Corp.	Johnstown, Pa.
Fielding, John Jr.,	Hanna Coal Co.	Cleveland, Ohio.
Fisher, Wm. J.	A. B. Farquhar Co., Ltd.	York, Pa.
Huston, H. C.	Johnston & Jennings Co.	Cleveland, Ohio.
Johnson, Allen J.	Anthracite Institute	Primos, Delaware Co., Pa.
Johnston, J. F.	Johnston Bros., Inc.	Ferrysburg, Mich.
Kershaw, C. C.	James Leffel & Co.	Springfield, Ohio.
Koven, Gustav H.	Waterfilm Boilers Inc.	Jersey City, N. J.
Locke, R. A.	Steel Heating Boiler Institute	Middletown, Pa.

Meikle, W. R.	Geneva Boiler Works	Burnham Boiler Corp., Irvington, N. Y.
Metcalf, F. B.	International Boiler	E. Stroudsburg, Pa.
Mooney, E. P.	Schwab Boiler Co.	Milwaukee, Wis.
Novotney, T. A.	Nat'l Radiator Corp.	Johnstown, Pa.
Peck, H. H. Jr.	Lookout Boiler & Mfg. Co.	Chattanooga, Tenn.
Reed, R. J.	Titusville Iron Wks. Co.	Titusville, Pa.
Ritter, W. W.	Brownell Co.	Dayton, Ohio.
Russell, W. B.	Kewanee Boiler Corp.	Kewanee, Ill.
Scheffey, W. Y.	Pottstown-Sotter Tank Wks.	Pottstown, Pa.
Schwab, M. C.	Schwab Boiler Co.	Milwaukee, Wis.
Stark, W. E.	Am. Soc. Heat. & Vent. Engrs.	Cleveland, Ohio.
Stiteler, J. H.	Orr & Sembower, Inc.	Reading, Pa.
Syphers, R. S.	The C. H. Dutton Co.	Kalamazoo, Mich.
Trefts, John C.	Farrar & Trefts, Inc.	Buffalo, N. Y.
Tull, Chas. N.	Spencer Heater Co.	Williamsport, Pa.
Turner, J. W.	Pacific Steel Boiler Div.	Detroit, Mich.
Webb, E. C.	Iron Firemen Mfg. Co.	Cleveland, Ohio.
Schuster, George	National Bureau of Standards Dept. of Commerce.	Washington, D. C.

The following explanatory material is essentially the 1929 Steel Heating Boiler Institute Code, and is included at the suggestion of the Institute as being useful to members of the industry who are small producers and require this information to comply with the requirements of Simplified Practice Recommendation R157-35.

This information will also be useful to those who are obliged to prepare detailed specifications for boilers of the type covered in the program, to stoker manufacturers, fuel interests and others as explained in the following paragraph.

1. PURPOSE

The purpose of the Simplified Practice Recommendation R157-35 is to serve as a basis for providing uniform ratings of steel heating boilers, thereby assisting the manufacturer in better planning for stocks of raw materials and finished products; also to simplify the work of the architect in specifying boilers, and to simplify the work of the contractor in securing boilers to meet the specifications.

2. SCOPE

Simplified Practice Recommendation R157-35 covers all steel horizontal firebox heating boilers containing more than one hundred and twenty-eight square feet of heating surface.

3. CONSTRUCTION REQUIREMENTS

A - The boiler shall be manufactured in accordance with the American Society of Mechanical Engineers Boiler Construction Code.

B - Accessory equipment furnished with the boiler not covered by the American Society of Mechanical Engineers Boiler Construction Code shall be designed according to standards, and made of material, recognized by the engineering profession as being particularly suitable for the conditions that are imposed.

C - Steel plates for any part of the boiler subjected to pressure shall be in accordance with the material specifications of the American Society of Mechanical Engineers Boiler Code. The chemical analysis of the plate may include not more than 0.35 per cent copper.

D - The boiler may be provided with open-hearth, seamless, lap-welded, or butt-welded steel tubes. The copper content of the tubes shall not exceed 0.35 per cent.

E - For the purpose of simplification steam boilers operating at pressure 15 pounds or less shall have only those openings for Steam Outlet Return Opening and Safety Valves as listed in Table III of Simplified Practice Recommendation R157-35.

The boiler may be provided with one or more threaded openings to be used for the connection of external auxiliary equipment.

F - The boiler when specified for water heating may be provided with two outlet and two return openings.

4. RATING

A - The rating of the boiler shall be expressed in square feet of steam or water radiation or in Btu. per hour.

B - One square foot of steam radiation shall be considered equal to the emission of 240 Btu per hour and one square foot of water radiation shall be considered equal to the emission of 150 Btu per hour.

C - The rating of a boiler, expressed in square feet of steam radiation, in which solid fuel hand-fired is used, is defined as an amount equal to fourteen times the heating surface of the boiler in square feet.

D - The rating of a boiler, expressed in square feet of steam radiation, in which solid fuel mechanically-fired, or in which oil or gas is burned, is defined as an amount equal to seventeen times the heating surface of the boiler in square feet.

E - For the purpose of simplification, only those values of rating as listed in Table I of Simplified Practice Recommendation R157-35, shall be catalogued.

5. HEATING SURFACE

A - Heating surface shall be expressed in square feet and include those surfaces in the boiler which are exposed to the products of combustion on one side and water on the other. The outer surface of tubes shall be used.

B - When a catalog boiler has the water leg height increased the catalog heating surface or rating shall not be increased.

C - For the purpose of simplification, only those values of heating surface as listed in Table I of Simplified Practice Recommendation R157-35, shall be catalogued.

6. GRATE AREA

A - Grate area shall be considered as the area of the grate surface expressed in square feet and measured in the plane of the top surface of the grate. For double grate boilers the grate area shall be considered as the

area of the upper grate plus $1/4$ of the area of the lower grate.

B - The grate area of a boiler for the rating as determined in Section 4-C shall be not less than that determined by the following formulas:

For boilers with ratings 1800 sq. ft. to 4000 sq. ft. of steam radiation:

$$\text{Grate area} = \sqrt{\frac{\text{Catalogue Rating (in sq. ft. steam radiation)} - 200}{25.5}}$$

For boilers with ratings of 4000 sq. ft. of steam radiation and larger:

$$\text{Grate area} = \sqrt{\frac{\text{Catalogue Rating (in sq. ft. steam radiation)} - 1500}{16.8}}$$

C - For the purpose of simplification, only those values of grate area as listed in Table I of Simplified Practice Recommendation R157-35, shall be catalogued.

7. FURNACE VOLUME

A - Furnace volume for furnaces in which solid fuel is burned shall be considered as the cubical content of the space between the bottom of the fuel bed and the first plane of entry into or between the tubes.

Furnace volume for furnaces in which pulverized fuel, liquid or gaseous fuel is burned shall be considered as the cubical content of the space between the hearth and the first plane of entry into or between the tubes.

B - The furnace volume for a boiler, with a rating as determined in Section 4-D in which oil or gas is burned, shall be not less than one cubic foot for every one hundred and forty square feet of steam rating.

C - The furnace volume for a boiler, with a rating as determined in Section 4-D in which bituminous coal, stoker-fired, is burned, shall be not less than one cubic foot for every one hundred and twenty-five square feet of steam rating.

D - For purpose of simplification only those values of furnace volumes as listed in Table II of Simplified Practice Recommendation R157-35, shall be catalogued.

E - The average height of furnace for the rating as determined in Section 4-D in which bituminous coal, stoker-fired, is burned, shall be not less than that determined graphically by Figure I or mathematically by the following formulae:

$$H = \sqrt{\frac{3R}{A} + \frac{(R)^2}{(1600)}} + \frac{R}{1600}$$

Where

H = average Furnace Height in inches as determined by the following formulae:

$$H = \frac{12F}{A} = \frac{12F}{WL}$$

R = Stoker fired boiler rating in sq. ft. steam radiation.

A = Plan area of Fire box in square feet, measured at the bottom of the fuel bed.

F = Furnace volume in cubic feet.

W = Average width of furnace in feet, measured at the bottom of the fuel bed.

L = Length of furnace in feet. If the furnace is longer than the fuel bed or contains a bridge wall, the total length of the furnace may be used except that this length shall not exceed $2 \frac{1}{2} W$.

8. BASE AND GRATES

A. Boilers with hand-fired steam rating of less than 10,000 sq. ft. or mechanically-fired steam ratings of less than 12,150 sq. ft. may be provided with bases not exceeding 15 inches in height.

Boilers with hand-fired steam ratings of 10,000 sq. ft. to and including 25,000 sq. ft. or mechanically-fired steam ratings of 12,150 sq. ft. to and including 30,360 sq. ft. may be provided with bases not exceeding 18 inches in height.

Boilers with hand-fired steam ratings of more than 25,000 sq. ft. or mechanically-fired steam ratings of more than 30,360 sq. ft. may be provided with bases not exceeding 21 inches in height.

B. The boiler may be provided with shaking grates or shaking and dumping grates or full dumping grates.

9. SMOKE OUTLET

A. The boiler may be provided with rear, top, side or angle smoke outlet to conform with the installation specifications.

10. TRIMMINGS

A. Steam boilers for hand-firing may be provided with only the following trimmings:

- a. One or more spring pop type safety valves. Safety valves may be of the up-blow, down-blow or side-outlet type.
- b. One water column with glass gauge, gauge glass valves, pet cock and not less than two compression gauge cocks. In lieu of a water column boilers may have a separate gauge glass with valves and pet cock and not less than two compression gauge cocks tapped directly into the boiler.

c. One pressure (not compound) steam gauge with stop cock and syphon.

d. One pressure combustion regulator. (Working element diameter not to exceed 6")

B. Steam boilers for mechanical firing may be provided with only the following trimmings:

a. One or more spring pop type safety valves. Safety valves may be of the up-blow, down-blow or side outlet type.

b. One water column with gauge glass, gauge glass valves, pet cock, and not less than two compression gauge cocks. In lieu of a water column boilers may have a separate gauge glass with valves and pet cock and not less than two compression gauge cocks tapped directly into the boiler.

c. One pressure steam gauge (not compound) with stop cock and syphon.

No trimming shall be furnished with water boilers.

11. FIRING TOOLS

A - Steam or water boilers for hand-firing or stoker-firing may have firing tools consisting of poker, hoe, slice bar and tube cleaner. The tube cleaner may be of the jointed type.

B - Steam or water boilers for oil or gas firing may be furnished with tube cleaner only. The tube cleaner rod may be of the jointed type.

12. PAINTING.

A - The boiler shall be painted by the manufacturer with at least one shop coat of paint suitable for hot surfaces.

13. INSTALLATION REQUIREMENTS

A - The rating as described for purposes of selection is intended to correspond to the estimated design load, which is to be the sum of the items a, b, and c.

a. The estimated normal heat emission of the connected radiation required to heat the building as determined by accepted practice expressed in square feet of radiation or in Btu per hour.

b. The estimated maximum heat required by water heaters or other apparatus connected to the boiler, expressed in square feet of radiation or in Btu per hour.

c. The estimated heat emission of piping connecting radiation and other apparatus to the boiler expressed in square feet of radiation or in Btu per hour.

14. GUARANTEE

A - The manufacturer shall guarantee to the purchaser substantially as follows:

"Our goods are guaranteed only to the extent of furnishing by freight new parts for any found defective in manufacture. No claim will be allowed unless presented within 60 days after receipt of goods. Goods must not be returned except by special permission and when so returned will be subject to discount."

15. CERTIFICATION

A - Manufacturers of boilers conforming to Simplified Practice Recommendation R157-35 shall attach a cast or etched label to the boiler in a conspicuous location which shall be worded as follows:

Conforms with the Industry Simplified Practice Recommendation R157-35 issued by the U. S. Dept. of Commerce.

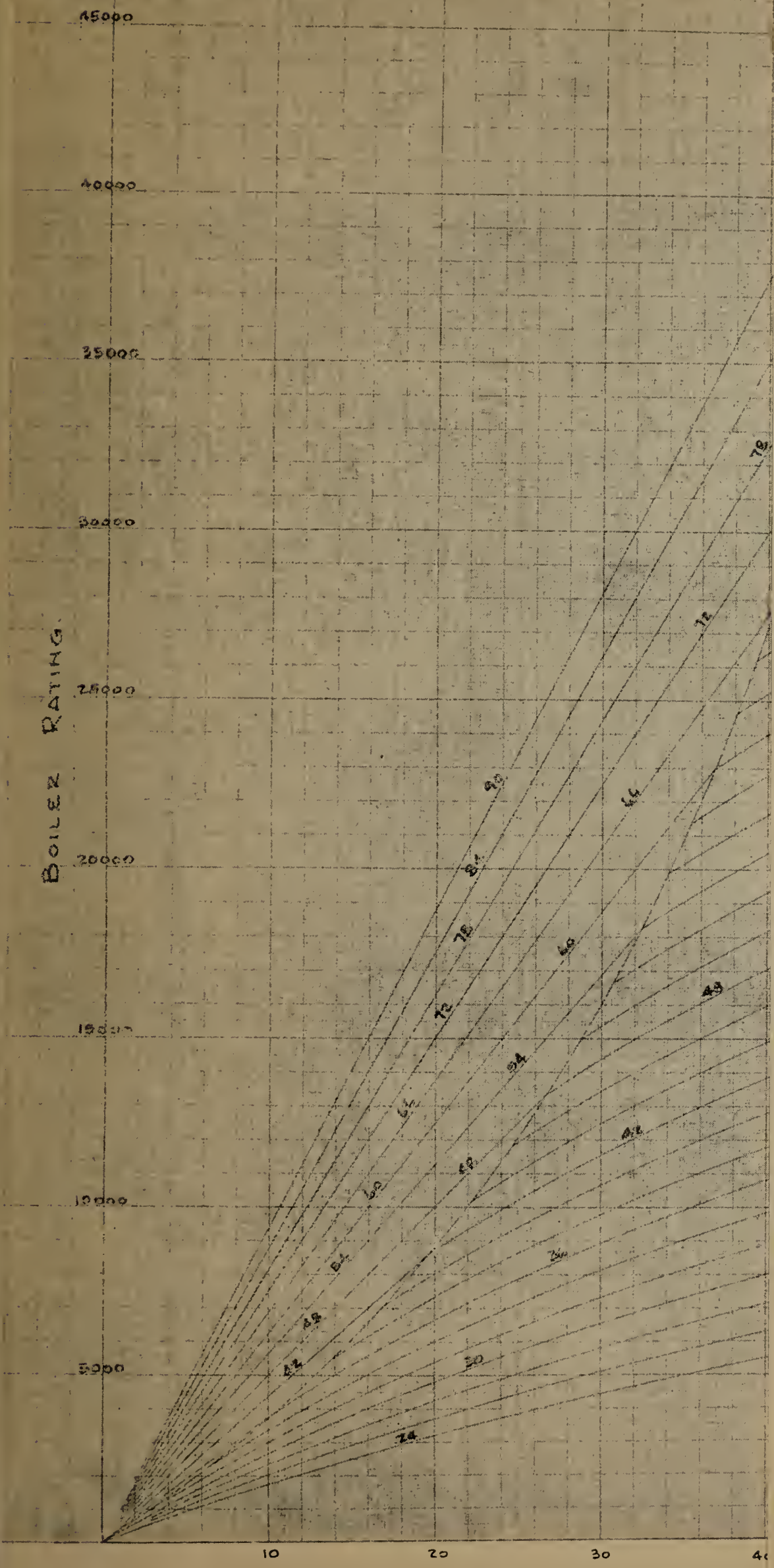


Fig. 1 STANDARD FURN

PLA

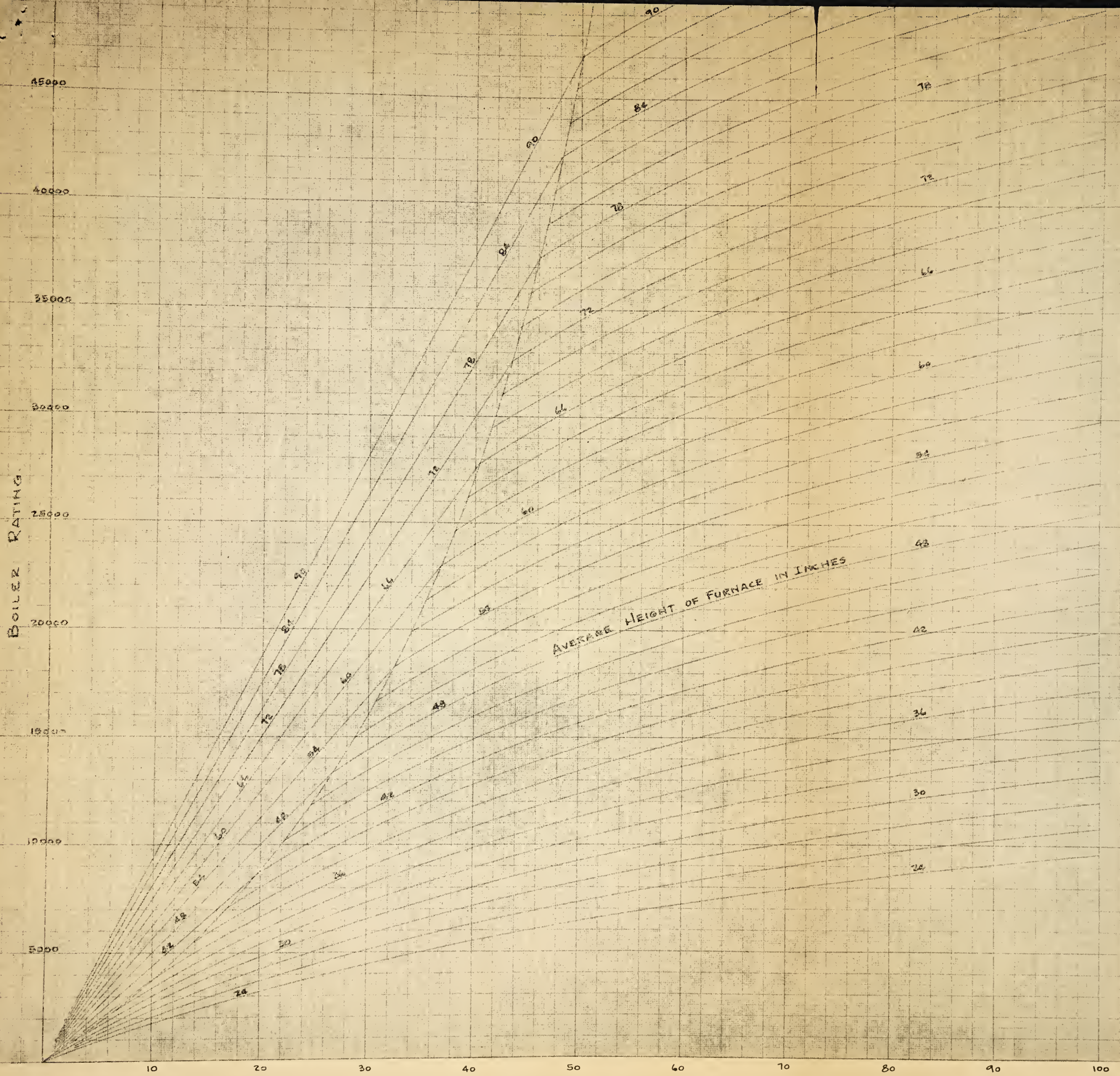


FIG. 1 STANDARD FURNACE HEIGHTS FOR STOKER FIRED BOILERS

ACCEPTANCE OF SIMPLIFIED PRACTICE RECOMMENDATION

(Please retain this sheet for your files)

ACCEPTANCE -- Having considered the statements on the REVERSE of this sheet, we hereby record our acceptance of the Simplified Practice Recommendation covering Steel Horizontal Firebox Heating Boilers as our standard practice. for a period of one year, beginning July 1, 1935, or until the present schedule is revised.

PROMOTING ADHERENCE -- Realizing that the value of any simplified practice recommendation obviously depends upon the amount of active support it receives, we will use such efforts as may be appropriate to secure additional adherence whenever the opportunity offers. (*)

SUPPLYING REVISION DATA -- We will supply, upon request, such information and suggestions as may be helpful in assisting a representative standing committee of the industry to determine the effectiveness of the recommendation and to keep it abreast of current conditions and best practice. It is understood that the standing committee, in cooperation with the Department of Commerce, will conduct periodic reviews to this end, and will recommend such changes as seem necessary. It is further understood that any changes proposed by the committee will be submitted to all acceptors of this recommendation, and will become effective only when a sufficient volume of acceptance has been recorded to indicate general approval.

(Kindly typewrite or print the first three lines)

Company _____

Street Address _____

City and State _____

Signed _____

Title _____

Date _____

IMPORTANT: Please designate below the proper classification of your company. This will eliminate unnecessary correspondence. Our interest is that of

a. _____ producer ()

_____ distributor ()

_____ or consumer ()

or _____

(insert other classification)

of Steel Horizontal Firebox Heating Boilers.

(*) In this connection, attention is invited to the importance of identification of simplified lines in trade literature, advertisements, etc., as a means of increasing the consumer's familiarity with the program.



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TO THE ACCEPTOR

In signing this acceptance blank, please bear the following points clearly in mind:

1. **RESPONSIBILITY OF THE INDUSTRY** -- This waste elimination program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned. The Department cooperates only when requested to do so, and only to such extent as appears desirable in order to secure the most beneficial results for all concerned.
2. **THE ACCEPTOR'S RESPONSIBILITY** -- You are entering into an entirely voluntary agreement, whereby the members of the industry, together with the distributors, and consumers of the product, and others concerned, hope to secure the benefits inherent in Simplified Practice. It is obvious that instances will occur in which it will be necessary to supply or purchase items not included in the simplified list. The purpose of simplification is to limit regular lines of stock items to those described in the schedule, and to place all others in the class of specials. CONSUMERS can make the program more effective if they will make a definite effort to **CONFINE THEIR PURCHASES TO THE SIZES, ETC., SPECIFIED IN THIS SIMPLIFIED PRACTICE RECOMMENDATION.**
3. **RESPONSIBILITY OF THE DEPARTMENT** -- The Department of Commerce has no regulatory powers with respect to Simplified Practice. Instead, Simplified Practice is based on voluntary cooperation. The function performed by the Department of Commerce is fourfold: First, to provide a neutral agency which will insure adequate consideration of the needs of all interests; second, to secure the widespread adoption of and close adherence to the recommendation; third, to add all possible prestige to this waste elimination plan; and fourth, to supply such assistance and advice in support of this program as past experience with similar projects may suggest.
4. **ACCEPTANCE BY INDUSTRY** -- When the Simplified Practice Recommendation identified on the face of this form has been accepted by manufacturers, distributors, and users whose production, distribution, and use of the named commodity represents sufficient volume of that commodity to insure the initial success of the program, it will be indorsed and published by the Department of Commerce in the interest of waste elimination in industry. If in the opinion of the standing committee of the industry and of the Department of Commerce, the volume of indicated support of any recommendation is insufficient to justify indorsement and publication, the Department reserves the right to withhold its indorsement and postpone publication until sufficient support has been obtained.